

**AB 118 Air Quality Improvement Program (AQIP)
Preliminary Funding Ideas for Fiscal Year (FY) 2009-2010**

Discussion Document for November 5 and 6, 2008 Public Workshops

ARB staff is developing a proposed Air Quality Improvement Program (AQIP) Funding Plan for Fiscal Year (FY) 2009-10. The Funding Plan is each year's plan for expending AQIP funds, and includes funding allocations, the administering agency (or potential administering agency) and general criteria for each project category. Staff plans to bring the FY 2009-10 Funding Plan to the Board for its consideration in Spring 2009.

This discussion document provides staff's preliminary funding ideas for FY 2009-10, a step in the development of the Funding Plan. These preliminary ideas are intended to elicit public comment and input.

Background

AB 118 (Nunez, 2007) provides ARB with approximately \$50 million annually for the AQIP upon appropriation by the Legislature. The purpose of the program is specified in Health and Safety Code, Section 44274(a):

The primary purpose of the program shall be to fund projects to reduce criteria air pollutants, improve air quality, and provide funding for research to determine and improve the air quality impacts of alternative transportation fuels and vehicles, vessels, and equipment technologies.

AQIP may fund a wide variety of air quality projects, including low-emission vehicles and equipment, research, and workforce training. Statute lists eight broad project types which are eligible for funding:

1. On- and off-road equipment projects.
2. Projects to reduce off-road gasoline exhaust and evaporative emissions.
3. Research projects to determine the air quality impacts of alternative fuels.
4. Projects that augment the University of California's agricultural experiment station and cooperative extension programs for research to increase sustainable biofuels production and improve the collection of biomass feedstock.
5. Incentives for consumers to replace lawn and garden equipment.
6. Incentives for medium- and heavy-duty vehicles and equipment mitigation including:
 - a. Lower emission school bus programs.
 - b. Electric, hybrid, and plug-in hybrid on- and off-road medium- and heavy-duty equipment.
 - c. Regional air quality improvement and attainment programs implemented by the state or districts in the most impacted regions of the state.
7. Workforce training initiatives related to advanced energy technology designed to reduce air pollution.
8. Incentives to reduce emissions from high emitting light-duty vehicles.

Implementation Priorities

The following implementation considerations are shaping staff's FY 2009-10 funding proposals:

- Funding is unlikely to be directed to all eight project categories in any single funding cycle. If a category does not receive funding in one year, it could still be considered for funding in future years.
- ARB staff is considering directing a significant portion of AQIP funding towards on-the-ground vehicle and equipment project categories that provide an immediate emission reduction benefit. We anticipate the following broad distribution of funds:
 - 65-85 percent of funds for clean vehicle/equipment deployment projects.
 - 10-30 percent of funds for advanced technology demonstration projects.
 - 0-10 percent of funds for research and workforce training projects.
- ARB staff is considering directing significant funding toward a few key project categories instead of spreading a small amount of funding across many categories.

Guiding Principles for Vehicle and Equipment Deployment Projects

At a public workshop on August 19, 2008, ARB staff presented the following guiding principles for selecting eligible vehicle and equipment project categories for FY 2009-10:

- Attain Ambient Air Quality Standards: Projects should help California meet federal ambient air quality standards by spurring deployment of technologies to meet our State Implementation Plan (SIP) "black box" commitments. Early deployment is critical to ensure significant technology penetration by 2024. Projects should also help achieve the state air quality standards, reduce toxic air contaminant emissions, and complement California's efforts to meet its climate change goals.
- Ready for Deployment: Projects should be cost-effective and be ready for immediate on-the-ground deployment. Technologies that could help meet SIP "black box" commitments but which are not ready for deployment may be considered for funding as demonstration projects.
- Modify Consumer Choice: Incentives should be focused on inducing vehicle and equipment purchases that would not otherwise have occurred.
- Consider Funding Need: Project types that do not have access to other incentive program funds, such as Carl Moyer Program and Goods Movement Emission Reduction Bond Program funds, would be prioritized. Eligible project categories should also not overlap with those AB 118 projects being funded by the California Energy Commission.

Prioritizing Categories

ARB staff applied the guiding principles to the vehicle and equipment project categories listed in the matrix below to help identify potential deployment and demonstration projects for FY 2009-10 AQIP funds.

Prioritization Matrix for Vehicle and Equipment Project Categories

Vehicle Types → Guiding Principles ↓	Heavy-Duty Natural Gas Vehicles/ Equipment	Hybrid Med- & Heavy-Duty Vehicles	Hybrid Off-Road Equipment	Zero-Emission Light-Duty Vehicles	Non-Plug-In Hybrid Light-Duty Vehicles	Plug-In Hybrid Light-Duty Vehicles	Fuel Cell Light-Duty Vehicles	Fuel Cell Buses	Others?
Helps meet black box commitments	◆	◆	◆	◆	◆	◆	◆	◆	
Ready for deployment*	◆	◆		◆	◆				
Incentive needed to spur purchase	◆	◆	◆	◆		◆	◆	◆	
No other significant funding source		◆	◆	◆	◆	◆	◆	◆	

Lawnmower replacement, car scrap, research, and workforce training project categories will be evaluated separately.

* Project categories not yet ready for deployment could be considered for funding as demonstration projects.

Two categories emerge as meeting all four of the guiding principles: medium and heavy duty hybrid vehicles and light-duty zero emission vehicles. The categories that do not meet the “ready for deployment” criterion are being further evaluated for funding as demonstration projects to help move them closer to being ready for deployment. Based on this analysis, ARB staff developed the preliminary AQIP funding targets for FY 2009-10 listed in the table below.

Preliminary FY 2009-10 AQIP Funding Targets

Project Category	Funding Amount	Additional Details
Incentives for the Purchase of New Medium- and Heavy-Duty Hybrid Trucks	\$25-30M	Provide ~\$20,000-30,000/ vehicle for new vehicle purchases via voucher or rebate (exact amount to be determined)
Incentives for the Purchase of New Zero-Emission and Plug-In Hybrid Light-Duty Vehicles	\$2-5M	Provide up to \$5,000/vehicle to consumers via rebate or voucher (following Alternative Fuel Incentive Program model)
Demonstration of Zero and Near Zero Emission Vehicles and Equipment <u>Examples of possible project categories:</u> <ul style="list-style-type: none"> • On-road heavy-duty vehicle technologies (e.g., fuel cell buses) • Fuel cell forklifts • Advanced technology agricultural equipment • Near zero-emission lawn and garden equipment • Diesel particulate filters for locomotives • Hybrid tugboat conversion • Additional stakeholder suggestions 	\$5-15M	ARB staff is proposing to hold ad hoc stakeholder workgroup meetings over the next few months to help evaluate and prioritize demonstration projects for inclusion in the FY 2009-10 Funding Plan.
Other Categories Being Investigated: <ul style="list-style-type: none"> • Workforce training to support deployment of new hybrid trucks • Lawn and garden equipment replacement • Air quality research • Additional stakeholder suggestions 	\$0-5M	To be determined
Continuation of Loan Program for Clean On-Road Heavy-Duty Trucks (funded in FY2008-09)	\$0-10M	Details and funding level to be determined based on initial implementation of FY2008-2009 truck loan program.
TOTAL	\$32-65M	